

## PATENT

## CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for scrambling information bits in a communications system, ~~the apparatus~~ comprising:

determining a scrambling sequence in accordance with a metric of system time, wherein said determining a scrambling sequence includes determining the metric in accordance with a subinterval of a system time interval in which the information bits are to be transmitted; and

scrambling information bits with the determined scrambling sequence in accordance with the metric.

2. (Cancelled)

3. (Currently Amended) The method of claim [[2]] 1, wherein said determining the metric in accordance with a subinterval of a system time interval in which the information bits are to be transmitted comprises:

determining the metric in accordance with a first subinterval of the system time interval.

4. (Currently Amended) The method of claim [[2]] 1, wherein said determining the scrambling sequence in accordance with a metric of system time comprises:

performing mapping of the metric on the scrambling sequence.

5. (Currently Amended) The method of claim 1, wherein said scrambling information bits with the scrambling sequence comprises:

performing [[and]] an exclusive-OR of the information bits with the scrambling sequence.

6. (Currently Amended) A method for unscrambling information bits in a communications system, ~~the apparatus~~ comprising:

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determining an unscrambling sequence in accordance with a metric of system time, wherein said determining an unscrambling sequence includes determining the metric in accordance with a first subinterval of a system time interval preceding a second subinterval of the system time interval by a pre-determined number of subintervals, the second subinterval including information bits to be unscrambled; and

unscrambling information bits with the determined unscrambling sequence in accordance with the metric.

7. (Cancelled)

8. (Currently Amended) The method as claimed in claim ~~[[7]]~~ 6, wherein said determining the metric in accordance with a first subinterval of the system time interval preceding a second subinterval of system time interval by a pre-determined number of subintervals comprises:

determining the first subinterval of the system time interval preceding the second subinterval of the system time interval by one subinterval.

9. (Currently Amended) The method as claimed in claim ~~[[7]]~~ 6, wherein said determining the unscrambling sequence in accordance with the metric comprises:

performing mapping of the metric on the unscrambling sequence.

10. (Currently Amended) The method of claim 6, wherein said unscrambling information bits with the scrambling sequence comprises:

performing ~~[[and]]~~ an exclusive-OR of the information bits with the unscrambling sequence.

11. (Cancelled)

12. (Cancelled)

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13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) An apparatus for scrambling information bits in a communications system, the apparatus comprising:

means for determining a scrambling sequence in accordance with a metric of system time, wherein said determining a scrambling sequence includes determining the metric in accordance with a subinterval of a system time interval in which the information bits are to be transmitted; and

means for scrambling information bits with the determined scrambling sequence in accordance with the metric.

21. (Cancelled)

22. (Currently Amended) The apparatus of claim [[21]] 20, wherein said means for determining the metric in accordance with a subinterval of a system time interval in which the information bits are to be transmitted comprises:

means for determining the metric in accordance with a first subinterval of the system time interval.

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23. (Currently Amended) The apparatus of claim ~~[[21]]~~ 20, wherein said means for determining the scrambling sequence in accordance with a metric of system time comprises:  
means for performing mapping of the metric on the scrambling sequence.

24. (Currently Amended) The apparatus of claim 20, wherein said means for scrambling information bits with the scrambling sequence comprises:  
means for performing ~~[[and]]~~ an exclusive-OR of the information bits with the scrambling sequence.

25. (Currently Amended) An apparatus for unscrambling information bits in a communications system, the apparatus comprising:

means for determining an unscrambling sequence in accordance with a metric of system time, wherein said determining an unscrambling sequence includes determining the metric in accordance with a first subinterval of a system time interval preceding a second subinterval of the system time interval by a pre-determined number of subintervals, the second subinterval including information bits to be unscrambled; and

means for unscrambling information bits with the determined unscrambling sequence in accordance with the metric.

26. (Cancelled)

27. (Currently Amended) The apparatus as claimed in claim ~~[[26]]~~ 25, wherein said means for determining the metric in accordance with a first subinterval of the system time interval preceding a second subinterval of system time interval by a pre-determined number of subintervals comprises:

means for determining the first subinterval of the system time interval preceding the second subinterval of the system time interval by one subinterval.

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28. (Currently Amended) The apparatus as claimed in claim ~~[[26]]~~ 25, wherein said means for determining the uscrambling sequence in accordance with the metric comprises:

means for performing mapping of the metric on the unscrambling sequence.

29. (Currently Amended) The apparatus of claim 25, wherein said means for unscrambling information bits with the scrambling sequence comprises:

means for performing ~~[[and]]~~ an exclusive-OR of the information bits with the unscrambling sequence.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)